

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-9 (Canceled)

10. (Currently amended) The method according to claim 9, further comprising A method comprising:

generating a plurality of interrupts in a transfer of symbols from fingers of a rake receiver to a processor, the interrupts corresponding to global symbol boundaries having a first rate independent of a time rate of symbol boundaries, wherein the processor reads symbol data from a plurality of data registers at the first rate independent of a second rate that the plurality of fingers write symbol data to the plurality of data registers;

writing symbols from a first of said fingers to an available one of a first data register and a second data register;

writing symbols from a second of said fingers to another available one of said first data register and said second data register;

reading symbols from said first data register and said second data register;
incrementing a counter when writing symbols to one of said first data register and said second data register;

decrementing the counter when reading symbols from one of said first data register and said second data register; and

if said counter reaches a predetermined value, reading more than one of said first data register and said second data register to which one of said fingers has written, in a given one of said global symbol boundaries, before reading from another of said global symbol boundaries.

11. (Currently amended) The method according to claim 9, further comprising A method comprising:

generating a plurality of interrupts in a transfer of symbols from fingers of a rake receiver to a processor, the interrupts corresponding to global symbol boundaries having a first rate independent of a time rate of symbol boundaries, wherein the processor reads symbol data from a plurality of data registers at the first rate independent of a second rate that the plurality of fingers write symbol data to the plurality of data registers;

writing symbols from a first of said fingers to an available one of a first data register and a second data register;

writing symbols from a second of said fingers to another available one of said first data register and said second data register;

reading symbols from said first data register and said second data register;

incrementing a counter when writing symbols to one of said first data register and said second data register;

decrementing the counter when reading symbols from one of said first data register and said second data register; and

if said counter reaches a predetermined value, continuing to read one of said first data register and said second data register in a given one of said global symbol boundaries, before reading from another of said global symbol boundaries.

Claims 12-21 (Canceled)

22. (Currently amended) The apparatus according to claim 20,An apparatus comprising:

a rake receiver having a plurality of fingers;

a processor for receiving interrupts, each interrupt signaling a transfer of a symbol from one of the plurality of fingers of the rake receiver to the processor at a first rate independent of a time rate of symbol boundaries,

wherein a first of said fingers writes symbols to an available one of a first data register and a second data register at a second rate, and a second of said fingers writes symbols to another available one of said first data register and said second data register at the second rate, and said processor reads symbols from said first data register and said second data register in global symbol boundaries at the first rate independent of the second rate; and

a counter that increments when symbols are written to one of said first data register and said second data register,

wherein, if said counter reaches a predetermined value, said processor reads more than one of said first data register and said second data register to which one of

said fingers has written, in a given one of said global symbol boundaries, before reading from another of said global symbol boundaries.

23. (Currently amended) The apparatus according to claim 21, An apparatus comprising:

a rake receiver having a plurality of fingers;

a processor for receiving interrupts, each interrupt signaling a transfer of a symbol from one of the plurality of fingers of the rake receiver to the processor at a first rate independent of a time rate of symbol boundaries,

wherein a first of said fingers writes symbols to an available one of a first data register and a second data register at a second rate, and a second of said fingers writes symbols to another available one of said first data register and said second data register at the second rate, and said processor reads symbols from said first data register and said second data register in global symbol boundaries at a first rate independent of the second rate; and

a counter that decrements when symbols are read from one of said first data register and said second data register,

wherein, if said counter reaches a predetermined value, said processor reads more than one of said first data register and said second data register to which one of said fingers has written, in a given one of said global symbol boundaries, before reading from another of said global symbol boundaries.

24. (Currently amended) The apparatus according to claim 20, An apparatus comprising:

a rake receiver having a plurality of fingers;

a processor for receiving interrupts, each interrupt signaling a transfer of a symbol from one of the plurality of fingers of the rake receiver to the processor at a first rate independent of a time rate of symbol boundaries,

wherein a first of said fingers writes symbols to an available one of a first data register and a second data register at a second rate, and a second of said fingers writes symbols to another available one of said first data register and said second data register at the second rate, and said processor reads symbols from said first data register and said second data register in global symbol boundaries at a first rate independent of the second rate; and

a counter that increments when symbols are written to one of said first data register and said second data register,

wherein, if said counter reaches a predetermined value, said processor continues reading one of said first data register and said second data register in a given one of said global symbol boundaries, before reading from another of said global symbol boundaries.

25. (Currently amended) The apparatus according to claim 21, An apparatus comprising:

a rake receiver having a plurality of fingers;

a processor for receiving interrupts, each interrupt signaling a transfer of a symbol from one of the plurality of fingers of the rake receiver to the processor at a first rate independent of a time rate of symbol boundaries,

wherein a first of said fingers writes symbols to an available one of a first data register and a second data register at a second rate, and a second of said fingers writes symbols to another available one of said first data register and said second data register at the second rate, and said processor reads symbols from said first data register and said second data register in global symbol boundaries at a first rate independent of the second rate; and

a counter that decrements when symbols are read from one of said first data register and said second data register,

wherein, if said counter reaches a predetermined value, said processor continues reading one of said first data register and said second data register in a given one of said global symbol boundaries, before reading from another of said global symbol boundaries.

Claims 26-30 (Canceled)

31. (Currently amended) The method according to claim 30, further comprising: A method comprising:

generating a plurality of interrupts in a transfer of symbols from fingers of a rake receiver to a processor at a first rate independent of a time rate of symbol boundaries;

generating global symbol boundaries at the first rate;

writing symbols from a first finger to an available one of a first data register and a second data register at a second rate;

writing symbols from a second finger to another available one of a first data register and a second data register at the second rate;

reading symbols from the first data register and the second data register based on the global symbol boundaries at the first rate independent of the second rate;

incrementing a counter when writing symbols to one of the first data register and the second data register;

decrementing the counter when reading symbols from one of the first data register and the second data register; and

if the counter reaches a predetermined value, reading more than one of the first data register and the second data register to which one of the fingers has written, in a given one of the global symbol boundaries, before reading from another of the global symbol boundaries.

32. (Currently amended) The method according to claim 30, further comprising: A method comprising:

generating a plurality of interrupts in a transfer of symbols from fingers of a rake receiver to a processor at a first rate independent of a time rate of symbol boundaries;

generating global symbol boundaries at the first rate;

writing symbols from a first finger to an available one of a first data register and a second data register at a second rate;

writing symbols from a second finger to another available one of a first data register and a second data register at the second rate;

reading symbols from the first data register and the second data register based on the global symbol boundaries at the first rate independent of the second rate;

incrementing a counter when writing symbols to one of the first data register and the second data register;

decrementing the counter when reading symbols from one of the first data register and the second data register; and

if the counter reaches a predetermined value, continuing to read one of the first data register and the second data register in a given one of the global symbol boundaries, before reading from another of the global symbol boundaries.

Claims 33-35 (Canceled)

36. (Currently amended) The apparatus according to claim 34, An apparatus comprising:

a rake receiver having a plurality of fingers,

a first of the fingers for writing symbols to an available one of a first data register and a second data register at a first rate and

a second of the fingers for writing symbols to another available one of the first data register and the second data register at the first rate;

a processor for receiving interrupts corresponding to global symbol boundaries having a second rate independent of a time rate of symbol boundaries;

the processor alternatively reads symbols from the first data register and the second data register at the global symbol boundaries at the second rate independent of the first rate; and

a counter that increments when symbols are written to one of the first data register and the second data register and decrements when reading symbols from one of the first data register and the second data register,

wherein, if the counter reaches a predetermined value, the processor reads more than one of the first data register and the second data register to which one of the fingers has written, in a given one of the global symbol boundaries, before reading from another of the global symbol boundaries.

37. (Canceled)

38. (Currently amended) The apparatus according to claim 34, An apparatus comprising:

a rake receiver having a plurality of fingers,

a first of the fingers for writing symbols to an available one of a first data register and a second data register at a first rate and

a second of the fingers for writing symbols to another available one of the first data register and the second data register at the first rate;

a processor for receiving interrupts corresponding to global symbol boundaries having a second rate independent of a time rate of symbol boundaries;

the processor alternatively reads symbols from the first data register and the second data register at the global symbol boundaries at the second rate independent of the first rate; and

a counter that increments when writing symbols to one of the first data register and the second data register and decrements when reading symbols from one of the first data register and the second data register,

wherein, if the counter reaches a predetermined value, the processor continues reading one of the first data register and the second data register in a given one of the global symbol boundaries, before reading from another of the global symbol boundaries.

39. (Cancelled)

40. (New) The method according to claims 10, 11, 31, or 32, wherein interrupts are generated with a fixed rate.

41. (New) The method according to claims 10, 11, 31, or 32, wherein said symbol boundaries have a constant rate or a rate that changes with time.

42. (New) The apparatus according to claims 22, 23, 24, 25, 36, or 38, wherein interrupts are generated with a fixed rate.

43. (New) The apparatus according to claims 22, 23, 24, 25, 36, or 38, wherein said symbol boundaries have a constant rate or a rate that changes with time.